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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,543	02-11-2002	Christopher S. Johnson	400.149US01	5205

7590 01-08-2003

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EXAMINER

LE, THONG QUOC

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 01/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/073,543

Applicant(s)

JOHNSON, CHRISTOPHER S.

Examiner

Thong Q. Le

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 11 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-22 are presented for examination.

#### ***Information Disclosure Statement***

2. This office acknowledges receipt of the following items from the Applicant:  
Information Disclosure Statement (IDS) filed on July 30, 2002.
3. Information disclosed and list on PTO 1449 was considered.

#### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: ***Bank decoder, Column decoder, Row decoder***. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
5. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

#### ***Specification***

6. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, claim fails to teach "four banks" or "eight banks", which claim regards as invention. Claim is required to cancel or amend for more clearly.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Li (U.S. Patent No. 6,044,032).

Regarding claim 1, Li discloses a memory device (Figure 1) comprising:

an array of memory cells arranged in a plurality of addressable banks (20, Figure 2), each bank comprises addressable rows and columns of memory cells (Column 2, lines 53-58); a mode register (Column 4, lines 42-45); and address circuitry (40) coupled to the mode register to configure the addressable banks in response to a program state of the mode register (Column 4, lines 43-65).

Regarding claims 2-11, 19-22, Li discloses the addressable banks can be configured as either four or eight banks (Figure 2, Column 2, lines 59-65) as claim 2 discloses, and the address circuitry selectively routes address signal (Figure 1, A0-A11, Ba0, BA1) to either a row decoder or a bank decoder in response to the mode register as claims 3, 6 disclose, and an array of X memory cells (Figure 2) as claims 4-5 disclose, and the address circuitry routes a selected address input signal to either the row or bank decoder in response to the mode register (Figure 3) as claim 7 disclose, and the address circuitry comprises a multiplex circuit (Figure 3, 48) as claim 8 discloses, and a column address decoder, a row address decoder and a bank address decoder (Column 4, lines 53-67, Column 5, lines 1-18) as claims 9, 19 disclose, and a first state of the mode register configures the array into Y banks each having  $4/Y$  memory cells, and second state of the mode register configures the array into 8 banks each  $4/8$  memory cells (Figure 3, Column 2, lines 53-67, Column 3, lines 1-56) as claims 10-11, 20-21 disclose, and the at least one external input connection comprises two input connections to receive a two-bit configuration signal (Column 3, lines 1-10) as claim 22 discloses..

Regarding claims 12-18, the apparatus discussed above would perform the method in claims 12-18.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 703-306-9123. The examiner can normally be reached on 8:00am-5:00pm M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on 703-308-4910. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3329.

A handwritten signature in cursive script, appearing to read "Thong Q. Le".

Thong Q. Le  
Examiner  
Art Unit 2818

December 26, 2002